ZINC OXIDE-BASE PARTICLES NOT TRANSMITTING INFRARED RAY AND THEIR PRODUCTION

Publication number: JP10338521
Publication date: 1998-12-22
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Classification:
- **international:** ***A01G13/02; A01G9/14; C01G9/02; C09K3/00;*** **A01G13/02; A01G9/14; C01G9/00; C09K3/00;** (IPC1-7): C01G9/02; A01G9/14; A01G13/02; C09K3/00
- **European:**
Application number: JP19970149108 19970606
Priority number(s): JP19970149108 19970606

Abstract of **JP10338521**

PROBLEM TO BE SOLVED: To improve IR shielding performance, single dispersibility, visible light transmittance, UV shielding performance and electric conductivity by regulating the total content of impurities which are ions and/or atoms of halogen elements except F, sulfuric acid and nitric acid radicals to a specified value (expressed in terms of atomic number ratio to zinc). SOLUTION: A soln. contg. a Zn compd., a compd. of a tri- and/or tetravalent metallic element (Md), 50-200 times (mol) as much monocarboxylic acid compd. as the Md and 1-30 times as much (weight) alcohol as the Zn compd. (expressed in terms of ZnO) or further contg. a compd. of a mono- or divalent metallic element (Ma) is heated to 150-200 deg.C and the resultant zinc oxide-base particles are heated at 200-400 deg.C for 1 min to 24 hr in a nonoxidizing atmosphere having <=0.1% concn. of oxygen in a hermetically sealed vessel to obtain the objective zinc oxide-base particles not transmitting IR and having <=0.5% (expressed in terms of atomic number ratio to Zn) total content of impurities which are ions of halogen elements except F, and/or SO4 <-> and NO3 <-> .